Amendments to the Claims:

This listing of Claims will replace all prior versions, and listings, of Claims in the application.

Listing of Claims:

1. (Currently Amended) A method of doubling the addressability and increasing the modulation transfer function of a display displaying images as a plurality of red pixels, green pixels, and blue pixels, comprising:

offsetting said green pixels from said red pixels and said blue pixels by at least one-half of the dimension of one of said red pixels in at least a first direction[.]; and

subpixel rendering input image data into output image data such that output image data is displayed as a set of logical pixels upon said display.

2. (Original) The method of claim 1, wherein the display is a projector and said offsetting is completed optically.

3. (Original) The method of claim 1, wherein the display is a projector and said offsetting is completed mechanically.

4. (Original) The method of claim 1, wherein the display is a cathode ray tube video display and said offsetting is completed electrostatically.

5. (Original) The method of claim 1, wherein the display is a cathode ray tube video display and said offsetting is completed magnetically.

6. (Currently Amended). A method of doubling the addressability and increasing the modulation transfer function of a display displaying images as a plurality of red pixels, green pixels, and blue pixels, comprising:

offsetting said red pixels, said green pixels, and said blue pixels by at least one third of the dimension of one of said pixels in at least a first direction[.]; and

subpixel rendering input image data into output image data such that output image data is displayed as a set of logical pixels upon said display.

7. (Original) The method of claim 6, wherein the display is a projector and said offsetting is completed optically.

8. (Original) The method of claim 6, wherein the display is a projector and said offsetting is completed mechanically.

9. (Original) The method of claim 6, wherein the display is a cathode ray tube video display and said offsetting is completed electrostatically.

10. (Original) The method of claim 6, wherein the display is a cathode ray tube video display and said offsetting is completed magnetically.

11. (Currently Amended) A method for forming a multipixel image on an imaging surface, comprising:

projecting for each pixel in said multipixel image a plurality of monochrome beams of different colors towards said imaging surface; and

directing each of said plurality of monochrome beams for each said pixel along a beam path towards said imaging surface, wherein images formed on said imaging surface from each said beam are convergent by substantially less than about 100% of spatial convergence such that the number of independently addressable elements are increased[.]; and

subpixel rendering input image data into output image data such that output image data is displayed as a set of logical pixels upon said display.

12. (Original) The method of claim 11, wherein said monochrome beams are convergent by less than about 75% of spatial convergence.

13. (Original) The method of claim 11, wherein said monochrome beams are convergent by about 50% of spatial convergence.

14. (Original) The method of claim 11, wherein said plurality of monochrome beams are light beams; and wherein said imaging surface is a projection screen.

15. (Original) The method of claim 14, wherein directing each of said plurality of

monochrome light beams is performed using optical elements.

16. (Original) The method of claim 15, wherein said directing each of said plurality of monochrome light beams further comprises placing an inclined plane lens in said beam paths.

17. (Original) The method of claim 16, wherein said inclined plane lens comprises a chromodispersive transparent material.

18. (Original) The method of claim 11, wherein a geometric center of each said monochrome beam lies along a locus of points describing a monotonic function.

19. (Original) A method for forming a multipixel image on an imaging surface, comprising:

projecting for each pixel in said multipixel image a plurality of electron beams exciting phosphors of different colors towards said imaging surface; and

directing each of said plurality of monochrome beams for each said pixel along a beam path towards said imaging surface, wherein images formed on said imaging surface from each said beam are convergent by substantially less than about 100% <u>of spatial convergence</u>[.]<u>; and</u>

<u>subpixel rendering input image data into output image data such that output image data is displayed as a set of logical pixels upon said display.</u>

20. (Original) The method of claim 19, wherein directing each of said plurality of electron beams is performed using electrostatic deflection.

21. (Original) The method of claim 19, wherein directing each of said plurality of electron beams is performed using magnetic deflection.

22. (Original) The method of claim 19, wherein said plurality of electron beams comprises a beam exciting substantially red emitting phosphors, a beam exciting substantially green emitting phosphors, and a beam exciting substantially blue emitting phosphors.

23. (Original) The method of claim 19, wherein a geometric center of each said electron beam lies along a locus of points describing a monotonic function.

24. (Withdrawn) A method for forming a multipixel image on a projection screen, comprising:

projecting for each pixel in said multipixel image a plurality of monochrome light beams of different colors towards said projection screen; and

directing each of said plurality of monochrome light beams for each said pixel along a path towards said projection screen, wherein images formed on said projection screen from each said light beam are convergent by substantially less than about 100%.

25. (Withdrawn) The method of claim 24, wherein said monochrome light beams

are convergent by less than about 75%.

26. (Withdrawn) The method of claim 24, wherein said monochrome light beams are convergent by about 50%.

27. (Withdrawn) The method of claim 24, wherein said directing each of said plurality of monochrome light beams is performed using optical elements.

28. (Withdrawn) The method of claim 24, wherein said directing each of said plurality of monochrome light beams further comprises placing an inclined plane lens in said beam paths.

29. (Withdrawn) The method of claim 28, wherein said inclined plane lens comprises a chromodispersive transparent material.

30. (Withdrawn) The method of claim 24, wherein said directing each of said plurality of monochrome light beams is performed mechanically.

31. (Withdrawn) The method of claim 24, wherein said plurality of monochrome light beams comprises a red beam, a green beam, and a blue beam.

32. (Withdrawn) The method of claim 24, wherein a geometric center of each said monochrome light beam lies along a locus of points describing a monotonic function.

33. (Withdrawn) A method for forming a multipixel image on a phosphor surface, comprising:

projecting for each pixel in said multipixel image a plurality of electron beams towards said phosphor surface; and

directing each of said plurality of electron beams for each said pixel along a path towards said phosphor surface, wherein images formed on said phosphor surface from each said electron beam are convergent by substantially less than about 100%.

34. (Withdrawn) The method of claim 33, wherein said electron beams are convergent by less than about 75%.

35. (Withdrawn) The method of claim 33, wherein said electron beams are convergent by about 50%.

36. (Withdrawn) The method of claim 33, wherein directing each of said plurality of electron beams is performed using electrostatic deflection.

37. (Withdrawn) The method of claim 33, wherein directing each of said plurality of electron beams is performed using magnetic deflection.

38. (Withdrawn) The method of claim 33, wherein said plurality of electron beams comprises a beam exciting substantially red emitting phosphors, beam exciting

substantially green emitting phosphors, and a beam exciting substantially blue emitting phosphors.

39. (Withdrawn) The method of claim 33, wherein a geometric center of each said electron beam lies along a locus of points describing a monotonic function.

40. (Withdrawn) An optical projector comprising:

a plurality of optical beam generators configured to generate pixels comprising monochrome light beams of different colors; and

beam projecting optics optically coupled to said plurality of optical beam generators and configured to project and focus said monochrome light beams along beam paths towards a projection screen to form a composite pixel thereon, said beam projecting optics further configured to offset said beam paths from one another such that images of said light beams projected on said screen for each pixel are convergent by substantially less than about 100%.

41. (Withdrawn) The optical projector of claim 40, wherein said plurality of monochrome light beams comprises a red beam, a green beam, and a blue beam.

42. (Withdrawn) The optical projector of claim 40, wherein said monochrome light beams are convergent by less than about 75%.

43. (Withdrawn) The optical projector of claim 40, wherein said monochrome light

beams are convergent by about 50%.

44. (Withdrawn) The optical projector of claim 40, further comprising an inclined plane lens disposed in said beam paths.

45. (Withdrawn) The optical projector of claim 44, wherein said inclined plane lens comprises a chromodispersive transparent material.

46. (Withdrawn) The optical projector of claim 40, wherein a geometric center of each said monochrome light beam lies along a locus of points describing a monotonic function.

47. (Withdrawn) A cathode ray tube video display comprising:

a plurality of electron beam generators configured to generate pixels comprising electron beams that excite phosphors of different colors; and

beam steering electronics coupled to said plurality of electron beam generators and configured to project and focus said electron beams along beam paths towards a phosphor screen to form a composite pixel thereon, said beam steering electronics further configured to offset said beam paths from one another such that images of said electron beams projected on said phosphor screen for each pixel are convergent by substantially less than about 100%.

48. (Withdrawn) The cathode ray tube video display of claim 47, wherein said

plurality of electron beams comprises a beam exciting substantially red emitting phosphors, a beam exciting substantially green emitting phosphors, and a beam exciting substantially blue emitting phosphors.

49. (Withdrawn) The cathode ray tube video display of claim 47, wherein said electron beams are convergent by less than about 75%.

50. (Withdrawn) The cathode ray tube video display of claim 47, wherein said electron beams are convergent by about 50%.

51. (Withdrawn) The cathode ray tube video display of claim 47, wherein a geometric center of each said electron beam lies along a locus of points describing a monotonic function.

52. (Withdrawn) An optical projector comprising:

a plurality of optical beam generating means configured to generate pixels comprising monochrome light beams of different colors; and

beam projecting means coupled to said plurality of optical beam generating means and configured to project and focus said monochrome light beams along beam paths towards a projection screen to form a composite pixel thereon, said beam projecting optics further configured to offset said beam paths from one another such that images of said light beams projected on said screen for each pixel are convergent by substantially less than about 100%.

53. (Withdrawn) The optical projector of claim 52, wherein said plurality of monochrome light beams comprises a red beam, a green beam, and a blue beam.

54. (Withdrawn) The optical projector of claim 52, wherein said monochrome light beams are convergent by less than about 75%.

55. (Withdrawn) The optical projector of claim 52, wherein said monochrome light beams are convergent by about 50%.

56. (Withdrawn) The optical projector of claim 52, further comprising an inclined plane lens disposed in said beam paths.

57. (Withdrawn) The optical projector of claim 56, wherein said inclined plane lens comprises a chromodispersive transparent material.

58. (Withdrawn) The optical projector of claim 52, wherein a geometric center of each said monochrome light beam lies along a locus of points describing a monotonic function.

59. (Withdrawn) A cathode ray tube video display comprising:

a plurality of electron beam generating means configured to generate pixels comprising electron beams exciting phosphors of different colors; and

beam steering means coupled to said plurality of electron beam generating means and configured to project and focus said electron beams along beam paths towards a phosphor screen to form a composite pixel thereon, said beam steering means further configured to offset said beam paths from one another such that images of said electron beams projected on said phosphor screen for each pixel are convergent by substantially less than about 100%.

60. (Withdrawn) The cathode ray tube video display of claim 59, wherein said plurality of electron beams comprises a beam exciting substantially red emitting phosphors, a beam exciting substantially green emitting phosphors, and a beam exciting substantially blue emitting phosphors.

61. (Withdrawn) The cathode ray tube video display of claim 59, wherein said electron beams are convergent by less than about 75%.

62. (Withdrawn) The cathode ray tube video display of claim 59, wherein said electron beams are convergent by about 50%.

63. (Withdrawn) The cathode ray tube video display of claim 59, wherein a geometric center of each said electron beam lies along a locus of points describing a monotonic function.

64. (Withdrawn) A pixel layout for displays wherein red pixel elements, green pixel

elements, and blue pixel elements overlap by substantially less than about 100%.

65. (Withdrawn) The pixel layout of claim 64, wherein said red pixel elements, green pixel elements, and blue pixel elements overlap by substantially less than about 75%.

66. (Withdrawn) The pixel layout of claim 64, wherein said red pixel elements, green pixel elements, and blue pixel elements overlap by substantially about 50%.

67. (Withdrawn) The pixel layout of claim 64, wherein said displays are selected from the group comprising projectors, cathode ray tube video displays, and subtractive displays.

68. (Withdrawn) The pixel layout of claim 64, wherein a geometric center of each red pixel elements, green pixel elements, and blue pixel elements lies along a locus of points describing a monotonic function.

69. (Withdrawn) A pixel layout for displays wherein red pixel elements and green pixel elements are identical diamonds offset by 50% in a horizontal direction.

70. (Withdrawn) The pixel layout of claim 69, wherein said displays are selected from the group comprising projectors, cathode ray tube video displays, and subtractive displays.

71. (Withdrawn) A pixel layout for displays wherein red pixel elements and green pixel elements are identical hexagons offset horizontally and vertically to create a triangular overlap.

72. (Withdrawn) The pixel layout of claim 71, wherein said displays are selected from the group comprising projectors, cathode ray tube video displays, and subtractive displays.

73. (Withdrawn) A subtractive color flat panel display, comprising:

a multispectral light source;

a first panel including an x by y matrix of a first color subtractive pixels disposed in front of said multispectral light source;

a second panel including an x by y matrix of a second color subtractive pixels disposed in front of said multispectral light source;

a third panel including an x by y matrix of a third color subtractive pixels disposed in front of said multispectral light source; and

wherein said first panel, said second panel, and third panel are offset from one another in x and y by substantially less than 100%.

74. (Withdrawn) The subtractive color flat panel display of claim 73, wherein said first panel is substantially cyan in color, said second panel is substantially magenta in color, and said third panel is substantially yellow in color.

75. (Withdrawn) The subtractive color flat panel display of claim 73, wherein a geometric center of said first panel, said second panel, and said third panel lies along a locus of points describing a monotonic function.

76. (Withdrawn) The subtractive color flat panel display of claim 73, wherein said first panel, said second panel, and third panel are offset from one another in x and y by less than about 75%.

77. (Withdrawn) The subtractive color flat panel display of claim 73, wherein said first panel, said second panel, and third panel are offset from one another in x and y by about 50%.

78. (Original) A method for forming a multipixel image on an imaging surface, comprising:

illuminating a multispectral light source;

projecting light from said multispectral light source towards a first panel including an x by y matrix of a first color subtractive pixels, a second panel including an x by y matrix of a second color subtractive pixels, and a third panel including an x by y matrix of a third color subtractive pixels for each pixel in said multipixel image, said panels are convergent by substantially less than about 100% <u>of spatial convergence</u>; and

directing each of said plurality of light beams for each said pixel along a path towards said imaging surface, wherein images formed on said imaging surface from each said light beam[.]<u>; and</u>

<u>subpixel rendering input image data into output image data such that output image data is displayed as a set of logical pixels upon said display.</u>

79. (Original) The method of claim 78, wherein said first panel is substantially cyan in color, said second panel is substantially magenta in color, and said third panel is substantially yellow in color.

80. (Original) The method of claim 78, wherein a geometric center of said first panel, said second panel, and said third panel lies along a locus of points describing a monotonic function.

81. (Currently Amended) The method of claim 78, wherein said first panel, said second panel, and third panel are offset from one another in x and y by less than about 75% <u>of spatial convergence</u>.

82. (Currently Amended) The method of claim 78, wherein said first panel, said second panel, and third panel are offset from one another in x and y by about 50% <u>of spatial convergence</u>.